

What is claimed is:

1. A method for manufacturing a conductive layer, comprising the steps of:
forming the conductive layer over the substrate having an insulating surface by discharging a conductive material; and
performing heat treatment over the conductive layer by a lamp or a laser beam.
2. A method for manufacturing a conductive layer according to claim 1, wherein the conductive layer is formed under reduced pressure.
3. A manufacturing method of a conductive layer according to Claim 2, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.
4. A manufacturing method of a conductive layer according to claim 1, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.
5. A method for manufacturing a conductive layer, comprising the steps of:
forming the conductive layer by discharging a conductive material so as to contact with source or drain wirings of a transistor; and
performing heat treatment over the conductive layer by a lamp or a laser beam.
6. A method for manufacturing a conductive layer according to claim 5, wherein the conductive layer is formed under reduced pressure.

7. A manufacturing method of a conductive layer according to Claim 6, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.

8. A manufacturing method of a conductive layer according to claim 5, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.

9. A method for manufacturing a semiconductor device, comprising the steps of :

laminating a semiconductor layer and a gate insulating layer over a substrate having an insulating surface;

forming a gate electrode over the gate insulating layer by discharging a conductive material;

forming an insulating layer over the gate electrode and forming a contact hole for exposing the semiconductor to the insulating layer;

forming source or drain wirings by discharging the conductive material so as to fill the contact hole; and

performing heat treatment over the gate electrode and the source and drain wirings by a lamp or a laser beam.

10. A method for manufacturing a semiconductor device according to claim 9, wherein the conductive layer is formed under reduced pressure.

11. A manufacturing method of a semiconductor device according to claim 10, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.

12. A manufacturing method of a semiconductor device according to claim 9, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.

13. A method for manufacturing a semiconductor device, comprising the steps of :

forming a gate electrode over a substrate having an insulating surface by discharging a conductive material;

laminating a semiconductor layer, a channel protection layer, and a semiconductor layer having one of n-type or p-type conductivity over the gate electrode;

forming source or drain wirings over a semiconductor layer having the one of n-type or p-type conductivity by discharging a conductive material; and

performing heat treatment over the gate electrode, and the source and drain wirings by a lamp or a laser beam.

14. A method for manufacturing a semiconductor device according to claim 13, wherein the conductive layer is formed under reduced pressure.

15. A manufacturing method of a semiconductor device according to Claim 14, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.

16. A manufacturing method of a semiconductor device according to claim 13, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.

17. A method of manufacturing a semiconductor device comprising:

forming a plurality of gate wirings and a plurality of gate electrodes over a substrate by discharging a first conductive material;

performing a first heat treatment over the plurality of gate wirings and the plurality of gate electrodes by a lamp or a laser beam,

forming an insulating film over the plurality of gate wirings;

laminating a plurality of semiconductor layers, a plurality of channel protection layers, and a plurality of semiconductor layers having one of n-type or p-type conductivity over the insulating film;

forming a plurality of pixel electrodes arranged in a matrix form over the substrate by discharging a second conductive material;

performing a second heat treatment over the plurality of pixel electrodes by a lamp or a laser beam;

forming a plurality of source wirings over the plurality of semiconductor layers having one of n-type or p-type conductivity by discharging a third conductive material wherein said plurality of source wirings extend across said plurality of gate wirings; and

performing a third heat treatment over the plurality of source wirings by a lamp or a laser beam.

18. A method for manufacturing a semiconductor device according to claim 17, wherein the first conductive material, the second conductive material and the third conductive material are formed under reduced pressure.

19. A manufacturing method of a semiconductor device according to Claim 18, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.

20. A manufacturing method of a semiconductor device according to claim 17, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.

21. A method of manufacturing a semiconductor device comprising:

forming a plurality of gate wirings and a plurality of gate electrodes over a substrate by discharging a first conductive material;

performing a first heat treatment over the plurality of gate wirings and the plurality of gate electrodes by a lamp or a laser beam;

forming a first insulating film over the plurality of gate wirings;

laminating a plurality of semiconductor layers, a plurality of channel protection layers, and a plurality of semiconductor layers having one of n-type or p-type conductivity over the first insulating film ;

forming a plurality of pixel electrodes arranged in a matrix form over the substrate by discharging a second conductive material,

performing a second heat treatment over the plurality of pixel electrodes by a lamp or a laser beam,

forming a plurality of source wirings over the plurality of semiconductor layers having one of n-type or p-type conductivity by discharging a third conductive material wherein said plurality of source wirings extend across said plurality of gate wirings;

performing a third heat treatment over the plurality of source wirings by a lamp or a laser beam, and

forming a second insulating film over the plurality of source wirings.

22. A method for manufacturing a semiconductor device according to claim 21, wherein the first conductive material, the second conductive material and the third conductive material are formed under reduced pressure.

23. A manufacturing method of a semiconductor device according to Claim 22, wherein the reduced pressure is 1×10^2 to 2×10^4 Pa.

24. A manufacturing method of a semiconductor device according to claim 21, wherein said semiconductor device is incorporated into at least one selected from the group consisting of a display device, a personal computer and a portable image reproduction device.